

Application No.: 10/627461

Case No.: 57989US004

Remarks

Favorable reconsideration of this application in light of the amendments and the following discussion is respectfully requested. Claims 1, 5, and 7 have been amended. Claims 1–10 remain pending in this application for consideration.

Amendments to the Specification

The specification is amended at page 9, line 7 to read “Z represents COO⁻ or SO₃⁻; M^b represents”. Adding the semicolon after SO₃⁻ serves to clarify that Z and M^b represent different things. The amendment corrects a facially obvious clerical error and adds no new matter to the disclosure.

The specification is also amended at page 11, lines 21–23. The chemical structure is redrawn with the three nitrogen atoms on the ring. The amendment is supported by the description in the original specification as filed at page 11, lines 19–20 wherein useful ammonia-generating compounds are described as “substituted and unsubstituted triazine derivatives such as those of the formula”. It is immediately obvious to one of ordinary skill in the chemical arts that triazine compounds refer to species wherein three carbon atoms and three nitrogen atoms form a six member ring. Thus, as the Examiner was able to immediately recognize, the figure provided at lines 21–23 should include the nitrogen atoms in the ring. The revised figure clearly shows this arrangement. Accordingly, no new matter has been added to the disclosure through this amendment.

The Applicants respectfully submit that these amendments overcome the objections to the specification and kindly ask that these objections be withdrawn.

Amendments to the Claims

Claim 1 is amended to put it in a more appropriate form for consideration and publication. Claims 5 and 7 are also amended. Discussion of these amendments follow below.

Claim Objection

Claim 5 was objected to. The Examiner asserted that the phrase “a perfluorinated monomer selected from C3–C8 olefins, perfluorinated vinyl ethers and mixtures thereof” was improper. The Examiner stated that when a mixture of monomers is included, they are not properly described as “a monomer.”

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Amended claim 5 removes any ambiguity that may have been present in claim 5 as originally filed. Support for the amendment can be found in claim 5 as originally filed and in the specification, for example, at page 5, lines 7–15. Accordingly, the Applicants submit that the objection to claim 5 has been overcome and respectfully request that the objection be withdrawn.

Claim Rejections

Rejection under 35 U.S.C. §§ 101 & 112

Claim 7 is rejected under 35 U.S.C. § 101 and, in the alternative, under § 112. The Examiner asserts that claim 7 provides for the use of a fluoroelastomer without reciting any active, positive steps delimiting how this use is actually practiced.

Claim 7 has been amended to recite a method claim. Amended claim 7 relates to a method comprising sealing electronic component manufacturing equipment with the fluoroelastomer defined in claim 6. Support for the amendment can be found particularly at page 3, lines 1–5. Accordingly, Applicants respectfully submit that the rejection of claim 7 under 35 U.S.C. §§ 101 & 112 has been overcome and kindly request that this rejection be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 1–10 are rejected under 35 U.S.C. 102(a) as purportedly being unpatentable over Schmiegel, U.S. 5,973,091 [hereinafter Schmiegel], in view of Beyer et al., U.S. 5,463,021 [hereinafter Beyer], and in view of Grootaert et al., U.S. 6,720,360 B1 [hereinafter Grootaert].

Claim 1 relates to a curable fluoroelastomer composition comprising a perfluoropolymer having one or more cure-sites selected from a halogen capable of participating in peroxide cure reaction and/or nitrile groups; an organic peroxide and/or a compound capable of effecting curing of the perfluoropolymer through said nitrile groups; and optionally a polyunsaturated coagent. The perfluoropolymer is essentially free of ionic end groups and the total amount of metal cations in the composition is not more than 10 µg/g perfluoropolymer.

The Examiner correctly admits in ¶ 8 of the rejection that Schmiegel “is silent about using a fluoroelastomer [sic] composition having the claimed content of metal cations, which is less than 10 µg/g polymer.”

In order to account for Schmiegel’s failure to teach, suggest or describe a composition wherein the total amount of metal cations is not more than 10mg/g perfluoropolymer, the Examiner combines the description of Beyer with Schmiegel. The Examiner asserts that Beyer teaches that

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aqueous dispersions can be purified. However, the combination of Schmiegell and Beyer still falls short of teaching, suggesting, or describing the invention of claim 1, since Beyer makes no mention of the level of cation content attainable by its process. Thus, the combination of Schmiegell and Beyer fails to teach, suggest or describe the composition as claimed in amended claim 1.

The Examiner acknowledges the failure of this combination to teach, suggest or describe the invention described in claim 1. The Examiner finds Grootaert to be an essential reference to combine with Schmiegell and Beyer in order to arrive at the invention described in claim 1.

Grootaert, however, is not available as a reference against the present application. As 35 U.S.C. § 103(c) provides, for applications filed on or after November 29, 1999, "Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

Grootaert was filed on February 1, 2000 and issued as a patent on April 13, 2004. The present application was filed on July 25, 2003. Therefore, Grootaert would only qualify, if at all, as prior art under § 102(e). As indicated below, both Grootaert and the present application were, at the time of invention of the present application, subject to an obligation of assignment to the same company. Based on the foregoing, Grootaert is not available as a reference against the present application. Please see MPEP § 706.02(f)(1) & (2).

The Patent Office fails to cite any grounds, independent of its reliance on Grootaert, for rejecting any of claims 2-10.

In light of the fact that the Examiner admits that the combination of Schmiegell and Beyer are insufficient to sustain the present § 103(a) rejection, and the fact that Grootaert is not available as a reference, the Applicants respectfully submit that the rejection of claims 1-10 is improper and kindly request that the rejection be withdrawn.

EVIDENCE OF COMMON OWNERSHIP

Application 10/627,461 and United States Patent 6,720,360 B1 were, at the time the invention of Application 10/627,461 was made, subject to an obligation of assignment to 3M Innovative Properties Company, St. Paul, MN (US).

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Conclusion

In view of the foregoing remarks, favorable reconsideration of the present application and the passing of this case to issue with all claims allowed is courteously solicited.

Should the Examiner wish to discuss any aspect of this application, applicants' attorney suggests a telephone interview in order to expedite the prosecution of the application.

Respectfully submitted,

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Date

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